[Email: E0708258@u.nus.edu]

EDUCATION

National University of Singapore (NUS) – Faculty of Science PHD student, Department of Pharmacy, *SINGA-NUS Scholarship*	August 2021 (ongoing)
Suez Canal University – Faculty of Pharmacy Master Degree, Department of Pharmacology & Toxicology	September 2018 - August 2021
Mansoura University - Faculty of Pharmacy Undergraduate student, B. SC. Pharmaceutical science Excellence with honor degree (89, 31 %)	September 2011 - June 2016
El-Westany secondary school – Egypt Undergraduate student grade of 97.7 %	September 2008 - June 2011
RESEARCH EXPERIENCE	

Dr. Shruti Bhatt's lab (National University of Singapore – PHD student) August 2021 - Present

- Investigating the molecular mechanism of resistance to therapy in TP53 mutated AML.
- Test therapeutic strategies that overcome the emergence of resistant sub-clones in TP53 mutated AML.

Department of Pharmacology & Toxicology (Suez Canal University September 2018 – August 2021 – **Master student)**

- · Establishment of a rat model for hepatocellular carcinoma.
- In vitro and in vivo investigation of amygdalin (natural product) plus metformin in comparison to doxorubicin as a conventional chemotherapy drug.
- Spent 6 months doing bench work in molecular biology as a part of the practical work for master degree at the National Research center, Egypt.

PUBLICATIONS

- **A.M. Mamdouh**, D.M. Khodeer, M.A. Tantawy, Y.M. Moustafa, In-vitro and in-vivo investigation of amygdalin, metformin, and combination of both against doxorubicin on hepatocellular carcinoma, Life Sci. 285 (2021) 119961. https://doi.org/10.1016/j.lfs.2021.119961.
- Olesinski, E., Bhatia, K., **Mamdouh, A.M.**, et al. (2023). Targeting mitochondrial apoptotic priming state to personalize therapy for relapsed acute myeloid leukemia. (Under submission).

LABORATORY TECHNIQUES

- Drug screening

- Tissue Culture

- Western blot
- RNA Extraction

- Immunofluorescence
- Comet Assay
- Flow Cytometry.
- Immunoprecipitation

- Co-culture experiments	- Cell viability assays.	- PCR	- Scratch assay.
- Transfection	- ELISA	- Confocal and Flu	uorescence Imaging.
- In vivo techniques (Mice): I.P. S.C. I.V and oral drug administration			- BH3 Profiling

APPLICATIONS AND SOFTWARE

- Bio Render (Illustration tool)	- FACS Diva (Flow cytometry)	- Microsoft Excel
- Flow Jo (Flow cytometry)	- Graph pad Prism (Statistical software)	- Microsoft Word
- ImageJ (Image processing & Foci quantification)		- Microsoft PowerPoint

TEACHING ASSISTANT SKILLS

- Worked as a full time teaching assistant at Horus University in Egypt since 2016 to 2021 and during that time, I shared in teaching the practical courses related to **Analytical chemistry**, **Pharmaceutical technology**, **Pharmacognosy & Phytochemistry**, **Biochemistry**, and **Pharmacology**.
- Assist in teaching laboratory sessions in PR2156 Integumentary & Ocular Systems: Science and Therapeutics for one semester and PHS3191 Laboratory Techniques in Pharmaceutical Science II for one semester at Department of Pharmacy, National University of Singapore.

Subject	Credit hours	Grade			
During Master					
- Biostatistics	2	A			
- Computer Science	2	A			
- English Language and Literature review	1	В			
- Pharmacometrics	2	A			
- Toxicometrics	2	В			
- Immuno pharmacology and oncology	2	С			
- Clinical Pharmacology	1	D			
During PHD					
- Bioprocess Technology	4	B+			
- Graduate Seminar Module in Pharmacy	4	B ⁺			
- Fundamental Topics in Pharmacy	4	A ⁻			
- Pharmacoepidemiology	4	В			

COURSE WORK